

POWER SECTION

Model No: AT475782.0

Revised: 9/22/2020

Rotor Specifications	
	inches
Overall Length	172.50
Contour Length	166.50
Major Diameter	2.798
Eccentricity	0.163
Head diameter	2.750
Thread Form	2.375 HEF Modified
Weight	239 lbs
Material	17-4 PH ¹

Stator Specifications	
	inches
Overall Length	180.00
Tube OD	4.75
Tube ID	3.75
Rubber Cutback Top/End	8.00 / 8.00
Weight	388 lbs
Number of Stages	2.0
Tube Material	4140/4142 Alloy Steel
Rubber Options	NBR-HPW & NBR-HPO

NBR-HPW (in)		Fits (+ Compression / - Loose)				
Size	Minor ²	75 °F	125 °F	175 °F	250 °F	300 °F ³
.5 US						
STD	2.466	0.007	0.022	0.037	0.059	0.073
.5 OS						
1.0 OS	2.483	-0.010	0.005	0.019	0.041	0.056
1.5 OS						
2.0 OS						
2.5 OS						

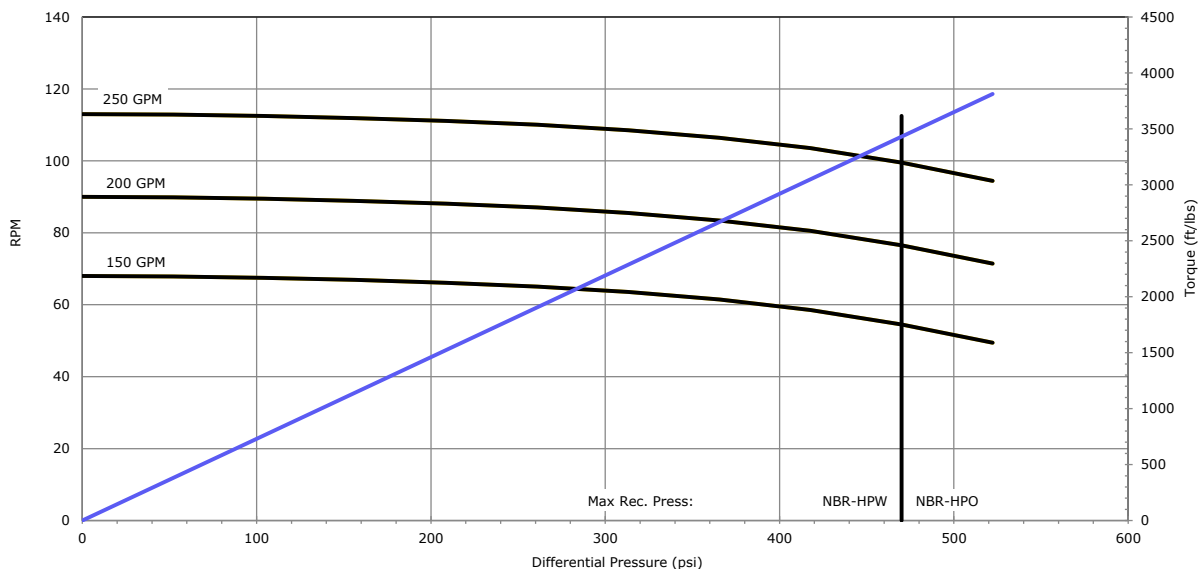
NBR-HPO (in)		Fits (+ Compression / - Loose)				
Size	Minor ²	75 °F	125 °F	175 °F	250 °F	300 °F ³
.5 US						
STD	2.466	0.007	0.022	0.037	0.059	0.073
.5 OS						
1.0 OS	2.483	-0.010	0.005	0.019	0.041	0.056
1.5 OS						
2.0 OS						
2.5 OS						

Performance Specifications	
Flow Range (gpm)	150 - 250
Speed Range (rpm)	70 - 110
Torque Slope (ft-lb/psi)	7.30
Rotation (rev/gal)	0.450
Off Bottom Pressure (psi)	50

Performance Details		NBR-HPW	NBR-HPO
Max Diff Press (psi)		470	470
Stall Diff Press (psi)		750	750
Max Torque (ft-lb)		3440	3440
Stall Torque (ft-lb)		5410	5410

■ (NBR-HPW/HPO)

■ Torque



¹ Coating options of chrome or tungsten carbide are available ² Vector Gauge Readings at Room Temp 75°F ³ BHCT Exceeding 320°F will void warranty for NBR-HPW/HPO.

Performance curves are based on new rotor and stator dimensions and for reference only. Actual performance may vary depending on fit and drilling conditions. The stall torque may exceed that specified for the connected components. Operating over the recommended limits may result in damage to the power section and connected components. Please visit www.AbacoDrilling.com for the latest specification revisions.

LOCATIONS

US: Headquarters 713 Northpark Central Dr., #400 Houston, TX 77073 - Tel: (281) 869-0700 - Fax: (281) 869-0701
 US: Sales & Distribution 11308 West Interstate 20 East, Odessa, TX 79765 - Tel: (432) 248-1814
 CANADA: Stator Manufacturing 6303-39th Street Leduc, Alberta T9E 0Z3 Canada - Tel: (780) 986-8947 - Fax: (780) 986-8842
 DUBAI UAE: Stator Manufacturing Oilfields Supply Center B#57, Jebel Ali, Dubai UAE, P.O. Box 19909 - Tel: 971-4-870-8600

POWER SECTION - METRIC

Model No: AT475782.0

Revised: 9/22/2020

Rotor Specifications	
	mm
Overall Length	4381.5
Contour Length	4229.1
Major Diameter	71.07
Eccentricity	4.13
Head diameter	69.85
Thread Form	2.375 HEF Modified
Weight	108 kg
Material	17-4 PH ¹

Stator Specifications	
	mm
Overall Length	4572.0
Tube OD	120.7
Tube ID	95.3
Rubber Cutback Top/End	203.0 / 203.0
Weight	176 kg
Number of Stages	2.0
Tube Material	4140/4142 Seamless Alloy Steel
Rubber Options	NBR-HPW & NBR-HPO

NBR-HPW (mm)		Fits (+ Compression / - Loose)				
Size	Minor ²	25 °C	75 °C	100 °C	125 °C	150 °C ³
.5 US						
STD	62.64	0.18	0.85	1.19	1.53	1.87
.5 OS						
1.0 OS	63.07	-0.25	0.41	0.75	1.08	1.41
1.5 OS						
2.0 OS						
2.5 OS						

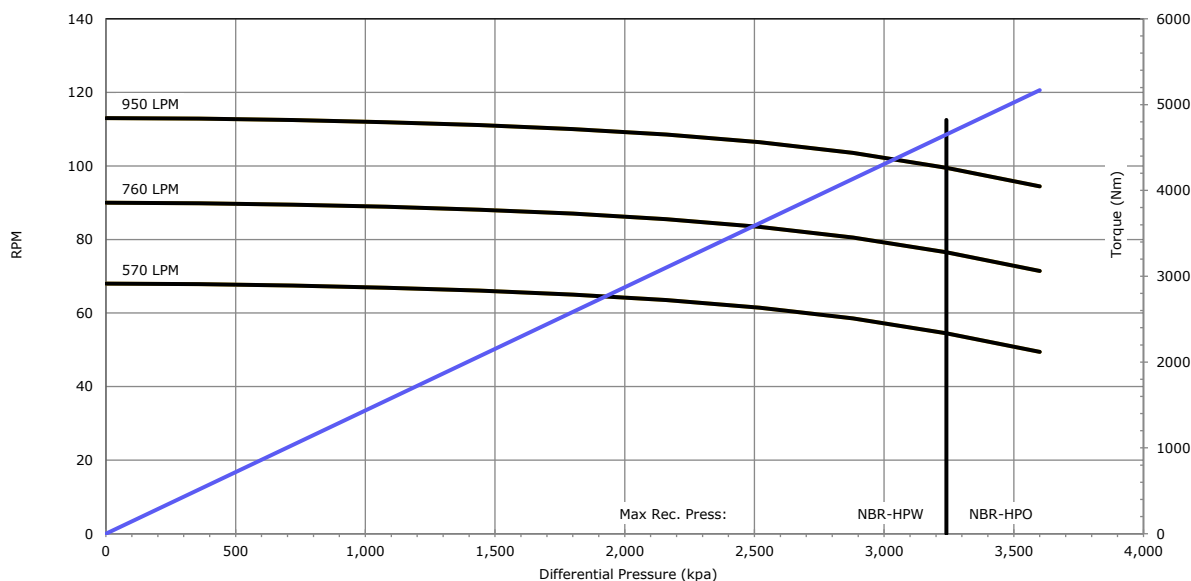
NBR-HPO (mm)		Fits (+ Compression / - Loose)				
Size	Minor ²	25 °C	75 °C	100 °C	125 °C	150 °C ³
.5 US						
STD	62.64	0.18	0.85	1.19	1.53	1.87
.5 OS						
1.0 OS	63.07	-0.25	0.41	0.75	1.08	1.41
1.5 OS						
2.0 OS						
2.5 OS						

Performance Specifications	
Flow Range (lpm)	570 - 950
Speed Range (rpm)	70 - 110
Torque Slope (Nm/kpa)	1.44
Rotation (rev/Liter)	0.1189
Off Bottom Pressure (kpa)	310

Performance Details		
	NBR-HPW	NBR-HPO
Max Diff Press (kpa)	3300	3300
Stall Diff Press (kpa)	5100	5200
Max Torque (Nm)	4700	4700
Stall Torque (Nm)	7400	7400

■ (NBR-HPW/HPO)

■ Torque



¹ Coating options of chrome or tungsten carbide are available ² Vector Gauge Readings at Room Temp 25°C ³ BHCT Exceeding 160°C will void warranty for NBR-HPW/HPO.

Performance curves are based on new rotor and stator dimensions and for reference only. Actual performance may vary depending on fit and drilling conditions. The stall torque may exceed that specified for the connected components. Operating over the recommended limits may result in damage to the power section and connected components. Please visit www.AbacoDrilling.com for the latest specification revisions.

LOCATIONS

US: Headquarters	713 Northpark Central Dr., #400 Houston, TX 77073 - Tel: (281) 869-0700 - Fax: (281) 869-0701
US: Sales & Distribution	11308 West Interstate 20 East, Odessa, TX 79765 - Tel: (432) 248-1814
CANADA: Stator Manufacturing	6303-39th Street Leduc, Alberta T9E 0Z3 Canada - Tel: (780) 986-8947 - Fax: (780) 986-8842
DUBAI UAE: Stator Manufacturing	Oilfields Supply Center B#57, Jebel Ali, Dubai UAE, P.O. Box 19909 - Tel: 971-4-870-8600